PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

EX PARTE YEN

Application for Patent

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Serial No. 09/578,816

Group Art Unit 2444

Examiner: Shingles, Kristie D.

FOR:

METHOD AND SYSTEM FOR REDUCTION OF DELAY AND BANDWIDTH REQUIREMENTS IN INTERNET DATA TRANSFER

APPEAL BRIEF [Revised]

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TABLE OF AUTHORITIES

CASES:

n/a

I. REAL PARTY IN INTEREST

The real party in interest is the Robert C. Yen, the inventor.

II. RELATED APPEALS AND INTERFERENCES

It is believed that there are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF THE CLAIMS

This application was filed May 24, 2000. After various amendments to the claims, claims 5, 11, 12, 15, 17-25 and 28 were finally rejected on October 14, 2009. The final rejection of claims 5, 11, 12, 15, 17-25 and 28 was appealed on January 14, 2010.

The final Office Action of October 14, 2009 was in the second consecutive time the Examiner re-opened prosecution with a final rejection. Such piecemeal examination is to be avoided as per MPEP. Furthermore, if prosecution is re-opened, the next Office Action should be non-final; therefore, it is believed that the finality of the final Office Action of October 14, 2009 was premature. Applicant advised Examiner of same on January 14, 2010 with the Amendment under 37 CFR 1.312, which was enter for purposed of Appeal on March 2, 2010. .

It is respectfully submitted that this piecemeal examination has been burdensome to Applicants and thus Applicants request due consideration for compact prosecution, see MPEP § 707.07(g), as well as a speedy and just determination of the issues, see MPEP § 904.03.

Claims 5, 11, 12, 15, 17-25 and 28 are now pending on Appeal, and the status of each claim is as follows:

Claims 5, 11, 12, 15, 17-25 and 28: Rejected

Claims 1-4: Withdrawn

Claims 6-10, 13-14, 16, and 26-27: Cancelled

IV. STATUS OF AMENDMENTS

All Amendments filed have been entered. The Amendment under 37 CFR 1.312 filed on January 14, 2010 was entered for purposes of Appeal on March 2, 2010.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The invention pertains to providing data transfers through data networks. According to one aspect of the invention, multiple-destination data packets can be utilized to send or receive data over a data network, such as the Internet. The use of multiple-destination data packets allows for better use of available network bandwidth, particularly in times where traffic or congestion is high.

Independent claim 5 provides a method for sending data over the Internet. See, e.g., Figures 2-11 and pages 7-24. The method recites: receiving a plurality of requests for a particular resource provided at a remote server on the Internet, the plurality of requests being provided by different requestors [e.g., Figure 3, ref. 302, Figure 4 ref. 402]; retrieving the particular resource from the remote servers once for the plurality of requests to obtain the particular resource requested by the plurality of requests [e.g., Figure 4, ref. 408; Figure 7, ref. 706; Figure 9, ref. 906, 916]; thereafter sending the particular resource to the different requestors [e.g., Figure 3, ref. 306; Figure 4, ref. 410; Figure 7, refs. 716; Figure 9, ref. 910]. The method also recites that the retrieving and/or the sending are performed after a predetermined quantity of the plurality of request have been received. The particular resource comprises digital data. The sending of the particular resource to the different requestors comprises forming multi-destination data packets to carry data of the particular resource [e.g., Figure 7, ref. 714; Figure 9; ref. 918], and transmitting the multi-destination data packets [e.g., Figure 7, ref. 716; Figure 9; refs. 910]. See, e.g., page 10, line 26 to page 12, line 18; page 13, line 15 to page 15, line 2; and page 17, line 20 to page 18, line 26.

Independent claim 12 provides a method for sending data over the Internet. See, e.g., Figures 2-11 and pages 7-24. The method recites: receiving a plurality of requests for a particular resource provided at a remote server on the Internet [e.g., Figure 3, ref. 302, Figure 4, ref. 402], the plurality of requests being provided by different requestors; retrieving the particular resource from the remote server once for the plurality of requests to obtain the particular resource requested by the plurality of requests [e.g., Figure 4, ref. 408; Figure 7, ref. 706; Figure 9, ref. 906, 916]; and thereafter sending the particular resource to the different requestors [e.g., Figure 3, ref. 306; Figure 4, ref. 410;

Figure 7, refs. 716; Figure 8, ref. 808, Figure 9, ref. 910]. A data distribution center is coupled to the Internet to assist with the transfer of data. The method also recites that the sending of the particular resource to the different requestors comprises: forming multi-destination data packets to carry data of the particular resource [e.g., Figure 7, ref. 714]; transmitting the multi-destination data packets from the remote server to the data distribution center [e.g., Figure 7, ref. 716]; converting the multi-destination data packets received at the data distribution center into single destination data packets [e.g., Figure 8, ref. 806]; and transmitting the single-destination data packets from the data distribution center to the different requestors, thereby delivering the particular resource requested to the different requestors, wherein the particular resource comprises digital data [e.g., Figure 8, ref. 808]. See, e.g., page 10, line 26 to page 12, line 18; page 13, line 15 to page 18, line 26.

Independent claim 15 provides a system for transmitting data from content servers to requestors through a data network. See, e.g., Figures 2-11 and pages 7-24. Claim 15 recites a plurality of data distribution centers which can be connected to the data network [e.g., Figure 2, ref. 202-206]. Additionally, data transmissions between the content servers and the data distribution centers use a multi-destination format so as to reduce congestion, and the multi-destination format uses multi-destination data packets, the multi-destination data packets include at least multiple destination fields and a data field [e.g., Figure 9, ref. 918]. See, e.g., page 7, line 24 to page 10, line 25; and page 17, line 20 to page 18, line 26.

Independent claim 21 provides a system for transmitting data through a data network form servers to clients. See, e.g., Figures 2-11 and pages 7-24. Claim 21 recites: a plurality of data distribution centers [e.g., Figure 2, ref. 202-206] coupled to the data network [e.g., Figure 2, ref. 208]; and server modules provided in the servers [Figure 9]. The server modules operate to receive data [e.g., Figure 8, ref. 802] to be transmitted to the clients and to form multi-destination packets to carry the data to at least one of said data distribution centers [e.g., Figure 7, ref. 714; Figure 8, ref. 806; Figure 9; ref. 918]. The data distribution centers receive the multi-destination packets from said server modules and operates to convert the multi-destination packets into single-destination packets [e.g., Figure 8, ref. 806] and to delivery the single-destination

packets to the appropriate clients [e.g., Figure 8, ref. 808]. See, e.g., page 7, line 24 to page 10, line 25; and page 13, line 15 to page 18, line 26.

Independent claim 28 provides a system for sending data over the internet. See, e.g. Figures 2-11 and pages 7-24. The system recites: means [Figure 2, ref. 210, 218, 216; Figure 9, ref. 902] for receiving a plurality of requests for a particular resource provided at a remote server on the Internet, the plurality of requests being provided by different requestors [e.g., Figure 3, ref. 302, Figure 4 ref. 402]; means [Figure 2, ref. 210, 218, 216; Figure 9, ref. 916] for retrieving the particular resource from the remote server once the plurality of requests to obtain the particular resource have been requested by the plurality of requests [e.g., Figure 4, ref. 408; Figure 7, ref. 706; Figure 9, ref. 916]; and means [Figure 2, ref. 210, 218, 216; Figure 9, ref. 910] for thereafter sending the particular resource to the different requestors using multi-destination data packets [e.g., Figure 3, ref. 306; Figure 4, ref. 410; Figure 7, refs. 716; Figure 9, ref. 910]. The particular resource comprises digital data. See, e.g., page 7, line 24 to page 10, line 25; page 10, line 26 to page 12, line 18; page 13, line 15 to page 15, line 2; and page 17, line 20 to page 18, line 26.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The issues presented on appeal are:

A. Whether claims 15 and 17-24 are anticipated by Agrusa et al. (US Patent No. 7,003,558).

B. Whether claims 12, 25 and 28 are unpatentable over Agrusa et al. (US Patent No. 7,003,558) in view of Singh (U.S. Patent No. 6,665,704).

C. Whether claims 5 and 11 are unpatentable over Agrusa et al. (US Patent No. 7,003,558) in view of Yamane et al. (U.S. Patent No. 5,701,580).

VII. ARGUMENT

A. CLAIMS 15 AND 17-24 ARE NOT ANTICIPATED BY AGRUSA ET AL.

Claim 15

Claim 15 pertains to a system for transmitting data from content servers to requestors through a data network. More particularly, claim 15 is as follows:

> A data transmission system for transmitting data from content servers to requestors through a data network, said data transmission system comprising:
> a plurality of data distribution centers, said data distribution centers being connected to the data network,
> wherein data transmissions between the content servers and said data distribution centers use a multi-destination format so as to reduce congestion, and
> wherein the multi-destination format uses multi-destination data packets, the multi-destination data packets include at least multiple destination fields and a data field.

1. AGRUSA ET AL. DOES NOT TEACH OR SUGGEST A PLURALITY OF DATA DISTRIBUTION CENTERS

Claim 15 pertains to a system for transmitting data from content servers to requestors through a data network. Among other things, claim 15 recites: "a plurality of data distribution centers, said distribution centers being connected to the data network."

In the Office Action, the Examiner has asserted that Agrusa et al. teaches: "a plurality of data distribution centers" (Office Action, page 3). However, contrary to the Examiner's assertion, it is respectfully submitted that Agrusa et al. does not teach or suggest "a plurality of data distribution centers" as recited in claim 15.

The Examiner cited to col. 3 lines 3-26, col. 4 lines 46-51, and col. 5 line 21- col. 6 line 23 to show that Agrusa et al. teaches "a plurality of data distribution centers, said distribution centers being connected to the data network." Applicants respectfully disagree. Col. 3 lines 3-26 merely teaches "a module that aggregates all requests for information directed to one of a plurality of interconnected computers in a process control environment, such as a factory." (Agrusa et al.: col. 2, line 67 – col. 3 line 3). The

aggregation as described in Agrusa et al. pertains to process control environment, not a data distribution center. In other words, Agrusa et al. simply teaches a computer program including a module that aggregates multiple requests for information directed to a computer that controls a piece of process control equipment, obtains the information being requested, and delivers copies of the particular resource to all of the requesting computers. While the module is connected to a plurality of interconnected computers across a data network, these interconnected computers do not deliver the particular resource; therefore, the interconnected computers are not data distribution centers. Instead, these interconnected computers are the source of the particular resource from which the computer module retrieves the requested resource. Col. 4 lines 46-51 and col. 5 line 21- col. 6 line 23 of Agrusa et al. likewise fail to teach or suggest a plurality of data distribution centers. As a result, Agrusa et al. does not teach a plurality of data distribution centers.

2. AGRUSA ET AL. DOES NOT TEACH OR SUGGEST DATA DISTRIBUTION CENTERS USE OF A MULTI-DESTINATION FORMAT SO AS TO REDUCE CONGESTION

Claim 15 pertains to a system for transmitting data from content servers to requestors through a data network. Among other things, claim 15 recites: "said data distribution centers use a multi-destination format so as to reduce congestion." In the Office Action, the Examiner has asserted that Agrusa et al. teaches: "said data distribution centers use a multi-destination format so as to reduce congestion" (Office Action, page 3). However, contrary to the Examiner's assertion, it is respectfully submitted that Agrusa et al. does not teach or suggest "said data distribution centers use a multi-destination format so as to reduce congestion" as recited in claim 15.

First, it should be noted that Agrusa et al. concerns a system including a module that aggregates requests for information from a computer in a process control environment, such as a factory. Furthermore, it should be noted that contrary to the Examiner's assertion, Agrusa et al. does not teach data distribution centers using a multi-destination format. Specifically, Agrusa et al. teaches aggregating a number of request directed to one computer, "[identifying] each of the requesting computers, and [delivers] (according to the standard communication protocol for process control) the

information to each of the requesting computers." (Agrusa et al., col. 3 lines: 13-7). However, no where in Agrusa et al. does it teach or suggest the use of a multi-destination format to transfer a particular resource to the different requestors.

In fact, Agrusa et al. teaches away from using a multi-destination format for transferring a particular resource to different requesting computers. Col. 9, lines 40-44 of Agrusa et al. in discussing the transmission of the requested information to the requesting computers, states:

> The program identifies which of the computers in the network have requested the information, for example by maintaining a list of the request as they are received, and transmits to each of the requesting computers a copy of the information that it obtained from the computer 306.

By maintaining a list and then transmitting a copy of the requested information to each of the requesting computers suggests that the data transmission taught by Agrusa et al. is not utilizing a multi-destination format. As a result, col. 9, lines 40-44 of Agrusa et al. teaches against any use of a multi-destination format for data transmissions.

3. AGRUSA ET AL. DOES NOT TEACH OR SUGGEST A MULTI-DESTINATION FORMAT THAT USES MULTI-DESTINATION DATA PACKETS INCLUDING AT LEAST MULTIPLE DESTINATION FIELDS AND A DATA FIELD

As stated above, claim 15 pertains to a system of transmitting data from content servers to requestors through a data network. Claim 15 recites not only a data distribution center use of a multi-destination format, but also recites "wherein the multi-destination format uses multi-destination data packets, the multi-destination data packets include at least multiple destination fields and a data field."

The Examiner again relies on Agrusa et al. to teach this claimed feature. However, Applicants respectfully point out that because Agrusa et al. fails to teach data distribution centers using a multi-destination format, as noted above, then Agrusa et al. must also fail to teach or suggest wherein the multi-destination format uses multi-destination data packets including at least multiple destination fields and a data field.

The Examiner cited several references in Agrusa et al. to show that Agrusa et al. teaches or suggests the use of multi-destination data packets, the multi-destination data packets include at least multiple destination fields and a data field. In the Office Action, the Examiner references Agrusa et al., col. 2 lines 66 – col. 3 line 14, col. 9 lines 23-50. However, neither of these referenced portions of Agrusa et al. teach or suggest data transmission using multi-destination data packets. Col. 2 lines 66- col. 3 line 14 simply teaches delivering the requested resource from one distribution center to each of the requesting computers. One of ordinary skill in the art would understand that transmitting data is not teaching or suggesting utilizing a multi-destination data packet to deliver the requested resource to each of the requesting computers. In fact, Agrusa et al. only goes so far to state that data would be transmitted "according to the standard communicating protocol for process control." Nothing in Agrusa et al. teaches or suggests that its process control environments could support, use or benefit from use of multi-destination data packets. Moreover, col. 9 lines 23-50 of Agrusa et al. fail to resolve the above mentioned deficiency. Accordingly, Agrusa et al. fails to teach or suggest wherein the multi-destination format uses multi-destination data packets including at least multiple destination fields and a data field.

Conclusion

Based on the foregoing, it is respectfully submitted that independent claim 15 is patentable distinct from Agrusa et al. Moreover, at least dependent claims 17-20 are further patentably distinct from Agrusa et al. for at least the reasons stated above. Accordingly, it is respectfully submitted that the Examiner should withdraw the rejection of claim 15 and 17-20 under 35 USC §102(e) as being anticipated by Agrusa et al.

Claim 21

On pages 3-4 of the Office Action, the Examiner has rejected claim 21 on the basis that they are anticipated by Agrusa et al.

Claim 21 pertains to a system for transmitting data through a data network from servers to clients. More particularly, claim 21 is as follows:

> A system for transmitting data through a data network form servers to clients, said system comprising:
>
> A plurality of data distribution centers coupled to the data network; and
>
> server modules provided in the servers, said server modules operate to receive data to be transmitted to the clients and to form multi-destination packets to carry the data to at least one of said data distribution centers,
>
> wherein said data distribution centers receive the multi-destination packets from said server modules and operates to convert the multi-destination packets into single-destination packets and to delivery the single-destination packets to the appropriate clients.

Hence, the system of claim 21 is adapted to provide similar features as those recited in claim 15. Accordingly, it is respectfully submitted that the Examiner's rejection of claim 21 is improper and should be withdrawn for at least reasons similar to those noted above with respect to claim 15. Namely, as noted above, Agrusa et al. fails to teach or suggest data distribution centers or server modules that support multi-destination packets. Agrusa et al. also fails to teach or suggest a data distribution center that operates to "convert the multi-destination packets into single-destination packets and to delivery the single-destination packets to the appropriate clients." Moreover, it is submitted that claim 21 is patentably distinct from Agrusa et al. Accordingly, it is respectfully submitted that independent claim 21 and their dependent claims (e.g., 22-24) are patentably distinct from Agrusa et al.

Conclusion

Based on the foregoing, it is respectfully submitted that independent claim 21 is patentable distinct from Agrusa et al. Moreover, as noted above, dependent claims 22-24 are further patentably distinct from Agrusa et al. Therefore, it is respectfully submitted that the Examiner should withdraw the rejection of claims 21-24 under 35 USC § 102(e) as being anticipated by Agrusa et al.

B. CLAIMS 12, 25 AND 28 ARE NOT OBVIOUS OVER AGRUSA ET AL. IN VIEW OF SINGH

Claim 12

Claim 12 pertains to a method for sending data over the Internet. More particularly, claim 12 is as follows:

> A method for sending data over the Internet, said method comprising:
> receiving a plurality of requests for a particular resource provided at a remote server on the Internet, the plurality of requests being provided by different requestors;
> retrieving the particular resource from the remote server once for the plurality of requests to obtain the particular resource requested by the plurality of requests; and
> thereafter sending the particular resource to the different requestors,
> wherein a data distribution center is coupled to the Internet to assist with the transfer of data, and
> wherein said sending of the particular resource to the different requestors comprises:
> forming multi-destination data packets to carry data of the particular resource;
> transmitting the multi-destination data packets from the remote server to the data distribution center;
> converting the multi-destination data packets received at the data distribution center into single destination data packets; and
> transmitting the single-destination data packets from the data distribution center to the different requestors, thereby delivering the particular resource requested to the different requestors,
> wherein the particular resource comprises digital data.

1. NONE OF THE CITED REFERENCES TEACH OR SUGGEST FORMING MULTI-DESTINATION DATA PACKETS TO CARRY DATA OF THE PARTICULAR RESOURCE

Claim 12 pertains to a method for sending data over the Internet. Among other things, claim 12 recites: "forming multi-destination data packets to carry data of the particular resource." In the Office Action, the Examiner has asserted that Agrusa et al. teaches: "forming multi-destination data packets to carry data of the particular resource" (Office Action, page 5). However, contrary to the Examiner's assertion, it is respectfully

submitted that Agrusa et al. does not teach or suggest "forming multi-destination data packets to carry data of the particular resource" as recited in claim 12.

First, it should be noted that Agrusa et al. concerns a system including a module that aggregates requests for information from a computer in a process control environment, such as a factory. Furthermore, it should be noted that contrary to the Examiner's assertion, Agrusa et al. does not teach or suggest forming multi-destination data packets to carry data of a particular resource. Specifically, Agrusa et al. teaches aggregating a number of requests directed to one computer, "[identifying] each of the requesting computers, and [delivers] (according to the standard communication protocol for process control) the information to each of the requesting computers." (Agrusa et al., Col. 3 lines: 13-7). However, no where in Agrusa et al. does it teach or suggest use of a multi-destination format to transfer a particular resource to the different requestors.

In fact, Agrusa et al. teaches away from using a multi-destination format for transferring a particular resource to different requesting computers. Col. 9, lines 40-44 of Agrusa et al. in discussing the transmission of the requested information to the requesting computers, states:

> The program identifies which of the computers in the network have requested the information, for example by maintaining a list of the request as they are received, and transmits to each of the requesting computers a copy of the information that it obtained from the computer 306.

By maintaining a list and then transmitting a copy of the requested information to each of the requesting computers suggests that the data transmission taught by Agrusa et al. is not utilizing a multi-destination format. As a result, col. 9, lines 40-44 of Agrusa et al. teaches against any use of a multi-destination format for data transmissions.

Neither would the combination of Singh with Agrusa et al. overcome the failure of Agrusa et al. to teach or suggest the use of a multi-destination format for data transmissions. Singh is directed to an invention of a proxy server that provides caching of information received from a server and then transmitting the information to multiple concurrent clients. Singh does not teach or suggest transmitting data through multi-destination data packets. Instead, Singh merely uses multiple processing threads to deliver the information from the local cache to the requesting clients. Accordingly, both

Agrusa et al. and Singh fail to teach or suggest "transmitting the multi-destination data packets from the remote server to the data distribution center" as recited in claim 12.

2. NONE OF THE CITED REFERENCES TEACH OR SUGGEST TRANSMITTING MULTI-DESTINATION DATA PACKETS FROM A REMOTE SERVER TO A DATA DISTRIBUTION CENTER

As noted above, claim 12 pertains to a method of transmitting data over the Internet. Claim 12 recites not only forming multi-destination data packets as discussed above, but also recites "transmitting the multi-destination data packets from the remote server to the data distribution center."

The Examiner again relies on Agrusa et al. to teach this claimed feature. However, the Examiner is mistaken. Agrusa et al. cannot possibly teach "transmitting the multi-destination data packets from the remote server to the data distribution center" because, as noted above, Agrusa et al. fails to even teach or suggest forming multi-destination data packets.

Furthermore, Agrusa et al. fundamentally fails to teach or suggest transmitting multi-destination data packets from a remote server to a data distribution center. In the Office Action, the Examiner references Agrusa et al. col. 3 lines 3-26. However, the referenced line simply teaches a module for aggregating multiple requests from different computers, the module identifies each of the requesting computers, and then delivers the information to each of the requesting computers according to the standard communication protocol for process control. Agrusa et al. only goes so far to state that data would be transmitted "according to the standard communicating protocol for process control." One of ordinary skill in the art would understand that transmitting data is not teaching or suggesting utilizing a multi-destination data packet to deliver the requested resource to each of the requesting computers. In fact, Agrusa et al. only goes so far to state that data would be transmitted "according to the standard communicating protocol for process control." Nothing in Agrusa et al. teaches or suggests that its process control environments could support, use or benefit from use of multi-destination data packets. Moreover, col. 9 lines 23-50 of Agrusa et al. fail to resolve the above

mentioned deficiency. Accordingly, Agrusa et al. fails to teach or suggest transmitting multi-destination data packets from a remote server to a date distribution center.

Moreover, neither would the combination of Singh with Agrusa et al. cure the failure of Agrusa et al. to teach "transmitting the multi-destination data packets fro the remote server to the data distribution center." Singh is directed to an invention of a proxy server that provides caching of information received from a server and then transmitting the information to multiple concurrent clients. Singh does not teach or suggest transmitting data through multi-destination data packets. Instead, Singh merely uses multiple processing threads to deliver the information from the local cache to the requesting clients. Accordingly, both Agrusa et al. and Singh fail to teach or suggest "transmitting the multi-destination data packets from the remote server to the data distribution center" as recited in claim 12.

3. NONE OF THE CITED REFERENCES TEACH OR SUGGEST CONVERTING MULTI-DESTINATION DATA PACKETS RECEIVED AT A DATA DISTRIBUTION CENTER INTO SINGLE DESTINATION DATA PACKETS

In the Office Action, the Examiner asserted that Agrusa et al. teaches this claimed feature (Office Action, page 5). Clearly, the Examiner's rejection is improper on its face and should be withdrawn for at least the reasons stated above. Specifically, if Agrusa et al. does not teach or suggest forming multi-destination data packets, then Agrusa et al. cannot possibly teach converting the multi-destination data packets received at the data distribution center into single destination data packets. Accordingly, it is respectfully requested that the Examiner's rejection be withdrawn for at least this reason.

The Examiner also referenced col. 2 line 66 – col. 3 line 14 to show that Agrusa et al. teaches converting multi-destination data packets into single destination data packets. However, these portions of Agrusa et al. only teach delivering the requested data according to the standard communication protocol for process control. In fact, no where does Agrusa et al. teach or suggest conversion of one form of data packet into another. Furthermore, col. 9 lines 40-44 suggests that Agrusa et al. does not transmit

data using multi-destination data packets because the program "transmits to each of the requesting computers a copy of the information that it obtained from the computer 306." According to one of ordinary skill in the art, transmitting data via a multi-destination format would involve delivering the particular resource once and simultaneously to each of the requesting computers. A copy of the information is only delivered when links to multiple destinations are split. As a result, col. 9, lines 40-44 of Agrusa et al. teaches against any use of a multi-destination format for data transmissions.

Furthermore, Singh fails to make up for the absence of Agrusa et al. to teach or suggest converting a multi-destination data packet into a single destination data packet. In fact, Singh fails to teach transmitting data through either multi-destination data packets or single-destination data packets.

4. NONE OF THE CITED REFERENCES TEACH OR SUGGEST TRANSMITTING THE SINGLE-DESTINATION DATA PACKETS FROM THE DATA DISTRIBUTION CENTER TO THE DIFFERENT REQUESTORS, THEREBY DELIVERING THE PARTICULAR RESOURCE REQUESTED TO THE DIFFERENT REQUESTORS

In the Office Action, the Examiner cited to Agrusa et al. in Col. 2 line 66- col. 3 line 14, col. 9 lines 23-50 to show that Agrusa et al. teaches or suggests "transmitting the single-destination data packets from the data distribution center to the different requestors." (Office Action, page 5). It is respectfully submitted that the Examiner's rejection is improper. For at least the reasons stated above, nowhere in Col. 2 line 66 – col. 3 line 14 does Agrusa et al. explicitly teach or suggest using multi-destination format or single-destination format to deliver the particular resource to each requesting computer. In fact, Agrusa et al. only goes so far as to teach delivering the information to each of the requesting computers according to a standard communication protocol for process control. Accordingly, it is submitted that Agrusa et al. does not teach or suggest "transmitting the single-destination data packets from the data distribution center to the different requestors" as recited in claim 12.

Furthermore, Singh fails to make up for the absence of Agrusa et al. to teach or suggest converting a multi-destination data packet into a single destination data packet.

In addition, Singh fails to teach or suggest transmitting the single-destination data packets from a data distribution center to different requestors.

Conclusion

Based on any of the foregoing reasons, it is submitted that claim 12 is patentably distinct from Agrusa et al., alone or in combination with Singh. Therefore, it is respectfully submitted that the Examiner's rejection of claim 12 is improper and should be withdrawn

Claim 28

Claim 28 pertains to a system for sending data over the Internet. More particularly, claim 28 is as follows:

> A system for sending data over the internet, said system comprising:
> means for receiving a plurality of requests for a particular resource provided at a remote server on the Internet, the plurality of requests being provided by different requestors;
> means for retrieving the particular resource from the remote server once the plurality of requests to obtain the particular resource have been requested by the plurality of requests; and
> means for thereafter sending the particular resource to the different requestors using multi-destination data packets,
> wherein the particular resource comprises digital data.

Claim 28 pertains to a system for sending data over the Internet. However, Agrusa et al. is directed to a system for permitting communication with process control equipment. Agrusa et al. is not operating to process requests for electronic resources from remote server over the Internet and then to send the requested resource to a plurality of requestors.

Moreover, claim 28 also recites the use of "multi-destination data packets" to subsequently send data of the particular resource to a plurality of different requestors for such data. Hence, the system of claim 28 is adapted to provide similar features as those recited in claim 12. However, as noted above in Applicant's argument with respect

to claim 12, neither Agrusa et al. nor Singh provide any teaching or suggestion for multi-destination data packets.

Accordingly, it is respectfully submitted that the Examiner's rejection of claim 28 is improper and should be withdrawn for at least reasons similar to those noted above with respect to claim 12.

C. CLAIM 5 IS UNPATENTABLE OVER AGRUSA ET AL. IN VIEW OF YAMANE ET AL.

Claim 5

Claim 5 pertains to a method for sending data over the Internet. More particularly, claim 5 is as follows:

> A method for sending data over the Internet, said method comprising:
> receiving a plurality of requests for a particular resource provided at a remote server on the Internet, the plurality of requests being provided by different requestors;
> retrieving the particular resource from the remote server once for the plurality of requests to obtain the particular resource requested by the plurality of requests; and
> thereafter sending the particular resource to the different requestors,
> wherein said retrieving and/or said sending are performed after a predetermined quantity of the plurality of requests have been received,
> wherein the particular resource comprises digital data, and
> wherein said sending of the particular resource to the different requestors comprises forming multi-destination data packets to carry data of the particular resource, and transmitting the multi-destination data packets.

Claim 5 pertains to a method for sending data over the Internet. Agrusa et al. is directed to a method for permitting communication with process control equipment. Agrusa et al. is not operating to process requests for electronic resources from remote server over the Internet and then to send the requested resource to a plurality of requestors.

More particularly, claim 5, among other things, recites "retrieving the particular resource from the remote server once for the plurality of requests to obtain the particular

resource requested by the plurality of requests" (claim 5, lines 5-6). Furthermore, claim 5 recites "said receiving and/or said sending are performed after a predetermined quantity of the plurality of requests have been received" (claim 5, lines 8-9). While the Examiner admits this deficiency of Agrusa et al. (Office Action, page 6), the Examiner combines Yamane et al. with Agrusa et al. However, Yamane et al. describes a system in which data can be wireless broadcast to a particular area. It appears that the broadcast can be done at a fixed time (e.g., 5:00 am) or when the number of requests from an area. See Fig. 8. Hence, Yamane et al. merely provides a wireless broadcast of data to anyone in an area (e.g., area m in Fig. 8). Nothing in Agrusa et al. or Yamane et al. teaches or suggests any notion of such processing of a predetermined quantity of requests for a particular resource.

Moreover, claim 5 also recites the use of "multi-destination data packets" to subsequently send data of the particular resource to a plurality of different requestors for such data. Specifically, similar to claim 12, claim 5 also recites "said sending of the particular resource to the different requestors comprises forming multi-destination data packets to carry data of the particular resource, and transmitting the multi-destination data packets." As noted above with respect to claim 12, Agrusa et al. is not able to teach or suggest any use of multi-destination data packets. Yamane et al. fails to teach or suggest forming or transmitting multi-destination data packets to send the data to particular requestors, and thus is not able to overcome the deficiencies of Agrusa et al. Hence, for this additional reason, it is submitted that claim 5 is further patentably distinct from Agrusa et al., even in combination with Yamane et al. Accordingly, it is respectfully submitted that independent claim 5 is patentably distinct from Agrusa et al. and Yamane et al. Accordingly, it is respectfully submitted that the Examiner's rejection of claim 5 is improper and should be withdrawn.

D. CONCLUSION

It is respectfully requested that the Board reverse the rejection of all pending claims under 35 USC §102(e) and 35 USC §103(a).

In the interest of speedy and just determination of the issues and for the many reasons set forth in this Appeal Brief, it is requested that the Board reverse the Examiner's rejection and should order the Examiner to pass this application to allowance.

If any additional fees are required in connection with the filing of this Appeal Brief, the Commissioner is authorized to charge Deposit Account No. 504298 (Order No. 1801-P001).

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1. (Withdrawn) A method for satisfying a request for content from a web server, said method comprising:

(a) determining whether a response to the request can be delayed;

(b) processing the request to obtain the response in an intentionally delayed manner when said determining (a) determines that the response to the request can be delayed; and

(c) processing the request without any intentional delay when said determining (a) determines that the response to the request cannot be delayed,

wherein the response being obtained in the intentionally delayed manner is delayed dependent on at least one of a priority level associated with the request, an amount of data being requested by the request, a type of data and a load or congestion level for the web server.

2. (Withdrawn) A method as recited in claim 1, wherein said processing (b) allows a group of requests for the same content to be processed together so as to reduce congestion at the web server.

3. (Withdrawn) A method as recited in claim 1, wherein the intentionally delayed manner is based on a time delay, the time delay being dependent on at least one of a priority level associated with the request, an amount of data being requested by the request, a type of data and a load or congestion level for the web server.

4. (Withdrawn) A method as recited in claim 3, wherein the time delay is limited by at least one of a maximum time delay and a quantity threshold.

5. (Previously Presented) A method for sending data over the Internet, said method comprising:

receiving a plurality of requests for a particular resource provided at a remote server on the Internet, the plurality of requests being provided by different requestors;

retrieving the particular resource from the remote server once for the plurality of requests to obtain the particular resource requested by the plurality of requests; and

thereafter sending the particular resource to the different requestors,

wherein said retrieving and/or said sending are performed after a predetermined quantity of the plurality of requests have been received,

wherein the particular resource comprises digital data, and

wherein said sending of the particular resource to the different requestors comprises forming multi-destination data packets to carry data of the particular resource, and transmitting the multi-destination data packets.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Previously Presented) A method for sending data over the Internet, said method comprising:

receiving a plurality of requests for a particular resource provided at a remote server on the Internet, the plurality of requests being provided by different requestors;

retrieving the particular resource from the remote server once for the plurality of requests to obtain the particular resource requested by the plurality of requests; and

thereafter sending the particular resource to the different requestors,

wherein a data distribution center is coupled to the Internet to assist with the transfer of data, and

wherein said sending of the particular resource to the different requestors comprises:

forming multi-destination data packets to carry data of the particular resource;

transmitting the multi-destination data packets from the remote server to the data distribution center;

converting the multi-destination data packets received at the data distribution center into single destination data packets; and

transmitting the single-destination data packets from the data distribution center to the different requestors, thereby delivering the particular resource requested to the different requestors,

wherein the particular resource comprises digital data.

13. (Cancelled)

14. (Cancelled)

15. (Previously Presented) A data transmission system for transmitting data from content servers to requestors through a data network, said data transmission system comprising:

a plurality of data distribution centers, said data distribution centers being connected to the data network,

wherein data transmissions between the content servers and said data distribution centers use a multi-destination format so as to reduce congestion, and

wherein the multi-destination format uses multi-destination data packets, the multi-destination data packets include at least multiple destination fields and a data field.

16. (Cancelled)

17. (Original) A data transmission system as recited in claim 15, wherein the data network is the Internet.

18. (Original) A data transmission system as recited in claim 15, wherein said data distribution centers are utilized between the content servers and the requestors.

19. (Original) A data transmission system as recited in claim 15, wherein data transmissions between said data distribution centers use a multi-destination format.

20. (Original) A data transmission system as recited in claim 15, wherein data distribution centers service a large number of content servers and only temporarily store data being requested and to be transmitted to the requestors.

21. (Original) A system for transmitting data through a data network form servers to clients, said system comprising:

a plurality of data distribution centers coupled to the data network; and

server modules provided in the servers, said server modules operate to receive data to be transmitted to the clients and to form multi-destination packets to carry the data to at least one of said data distribution centers,

wherein said data distribution centers receive the multi-destination packets from said server modules and operates to convert the multi-destination packets into single-destination packets and to delivery the single-destination packets to the appropriate clients.

22. (Original) A system as recited in claim 21, wherein each of the data distribution centers is in a geographically different location.

23. (Original) A system as recited in claim 21, wherein the data network is a global computer network.

24. (Original) A system as recited in claim 21, wherein the multi-destination packets include a plurality of destination locations and data.

25. (Previously Presented)
A method for transferring data through a data network from a server to clients, wherein the improvement comprises transferring the data between the server and a data

distribution center using a multi-destination format, thereby reducing congestion at the server.

26. (Cancelled)

27. (Cancelled)

28. (Previously Presented) A system for sending data over the internet, said system comprising:

means for receiving a plurality of requests for a particular resource provided at a remote server on the Internet, the plurality of requests being provided by different requestors;

means for retrieving the particular resource from the remote server once the plurality of requests to obtain the particular resource have been requested by the plurality of requests; and

means for thereafter sending the particular resource to the different requestors using multi-destination data packets,

wherein the particular resource comprises digital data.

IX. EVIDENCE APPENDIX

There is currently no evidence entered and relied upon in this Appeal.

X. RELATED PROCEEDINGS APPENDIX

There are currently no decisions rendered by a court or the Board in any proceeding identified in the Related Appeals and Interferences section.